

NOTES ON *PULTENAEA* Sm. (FABACEAE) IN VICTORIA

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ABSTRACT

M.G. Corrick. Notes on *Pultenaea* Sm. (Fabaceae) in Victoria. *Muelleria* 8(3): 391–394 (1994). — One species of *Pultenaea*, *P. viscosa* R.Br. ex Benth. is placed in synonymy under *P. mollis* Lindl. and three varieties of *Pultenaea*, *P. paleacea* Willd. var. *sericea* Benth., *P. paleacea* Willd. var. *williamsonii* (Maiden) H.B. Williamson and *P. juniperina* Labill. var. *mucronata* (Benth.) Corrick are raised to specific rank as *P. sericea* (Benth.) Corrick, *P. williamsonii* Maiden and *P. forsythiana* Blakely respectively.

INTRODUCTION

In order to facilitate an account of the genus *Pultenaea* Sm. for the forthcoming *Flora of Victoria* some nomenclatural changes are necessary. Several varieties of *P. paleacea* Willd. have been described but both White (1939) and Briggs & Crisp (1994) suggest that some or perhaps all of these should be raised to specific rank. Recent studies of the two of these taxa occurring in Victoria uphold this view and the necessary changes are now made.

Specific rank is also considered more appropriate for the taxon currently known as *P. juniperina* Labill. var. *mucronata* (Benth.) Corrick, a view held by Blakely when describing it as *P. forsythiana* Blakely, and upheld by M.D. Crisp (pers. comm.). This change is also now formally made.

P. viscosa R.Br. ex Benth. is relegated to synonymy under *P. mollis* Lindl.

TAXONOMY

Pultenaea williamsonii Maiden, *The Victorian Naturalist* 22: 99 (1905). TYPE: Victoria, Strathbogie, near creeks, Nov. 1902, *Anton W. Vroland* (No. 921 of H.B. Williamson) (HOLO: NSW; ISO: MEL).

P. paleacea var. *williamsonii* H.B. Williamson, *Proc. Roy. Soc. Victoria* ns. 32: 22 (1922).

Pultenaea williamsonii is distinguished by its broad, flat, widely and irregularly spaced leaves which are usually more than 3 mm wide and less than six times as long as wide and by the broad bracteoles 1.5–2 mm wide compared with a width of up to 1.25 mm in *P. paleacea* var. *paleacea* and 1 mm in *P. helophila*, and by the position of the bracteoles not more than 0.5 mm above the base of the calyx tube.

P. williamsonii is confined to a few localities in the Central Highlands of Victoria, in the Strathbogie area, near Eildon and near Wonangatta.

It is unfortunate that under the International Code of Botanical Nomenclature the original epithet of Maiden must be retained in spite of the similarity in name of *P. williamsoniana* J.H. Willis which is confined to the northern part of the Grampians. Examples cited under Article 64.3 of the ICBN indicate that an application to have the specific epithet *williamsoniana* rejected on the basis of confusion due to this similarity would not succeed.

SELECTED SPECIMENS EXAMINED

Victoria — Eastern Highlands: 1 km E of Mt Barranhet (c. 10 km due E of Strathbogie), 22 Jun. 1985, *D.E. Albrecht 1818* (MEL); Near Wonangatta Station, 1 Dec. 1989, *E.A. Chesterfield 2586* (MEL); Beside Tatong-Tolmie road near Archerton, 10 Dec. 1974, *M.G. Corrick 4883* (MEL); Between Eildon and Jamieson near Big River, 12 Nov. 1962, *B. Strange s.n.* (MEL 536106).

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Pultenaea sericea (Benth.) Corrick, *stat. nov.*

P. paleacea var. *sericea* Benth., *Fl. Austral.* 2: 116 (1864). LECTOTYPE (here selected): Victoria, Marshy places near Melbourne, 4 Dec. 1855, *F.M. Adamson* (K).

P. sericea is distinguished by its narrow linear leaves usually not more than 3 mm wide and more than 8 times as long as wide and by the narrow bracteoles 0.75–1 mm wide attached about 2–3 mm above the base of the calyx-tube. The floral bracts are also distinctive in their pale straw colour and in that the longest of them exceeds the length of the calyx in contrast to the broad floral bracts of *P. williamsonii* which are usually shorter than the calyx.

P. sericea occurs in heathlands of southern Victoria and NE Tasmania.

SELECTED SPECIMENS EXAMINED

Victoria — Wilson's Promontory, 9 Nov. 1908, *Audas and St John s.n.* (MEL 624751); Cicada Trail, between Mueller and Wingan Rivers, 22 Nov. 1969, *A.C. Beauglehole 31969 and E.W. Finck* (MEL); Langwarrin Railway Reserve, 12 Nov. 1978, *M.G. Corrick 6174* (MEL); Railway easement between Clarkefield and Riddell's Creek, 19 Oct. 1982, *B. Kemp s.n.* (MEL 628577).

Tasmania — Bridport, 15 Nov. 1952, *W.M. Curtis s.n.* (MEL 598217).

Comparison of some distinguishing characters of *P. paleacea* var. *paleacea*, *P. helophila* and *P. williamsonii* [adapted from Briggs & Crisp (1994)]

	<i>P. paleacea</i>	<i>P. helophila</i>	<i>P. williamsonii</i>
Leaf length	6–12 [23]	6–25	5–25
Leaf width	0.8–3 [5]	1–3 [6]	2–8
Stipule length	5–7 [10]	6–10	5–7
Bracteole length	4–6	3.5–5	4.5–5
Bracteole width	1–1.25	0.75–1	1.5–2
Bracteole attachment from base of calyx	1.5–2.5	2–3	0–0.5
Floral bract colour	Dark reddish brown	Pale straw colour	Dark reddish brown

(measurements in mm)

Pultenaea forsythiana Blakely, *Contr. New South Wales Natl. Herb.* 1: 121 (1941). TYPE: New South Wales, Lobbs Hole, Nov. 1900, *W. Forsyth* (NSW).

P. juniperina Labill. var. *leiocalyx* Blakely, *Contr. Natl. Herb. New South Wales* 1: 123 (Mar. 1941). LECTOTYPE (here selected): New South Wales, Mt Kosciusko up to 5500 ft, Jan. 1898, *J.H. Maiden s.n.* (NSW).

P. forsythiana Blakely var. *uniflora* Blakely, *Contr. New South Wales. Natl. Herb.* 1: 122 (Mar. 1941). LECTOTYPE (here selected): New South Wales, Brindabella Mtn, Federal Capital Territory, 10 Dec. 1911, *R.H. Cambage No. 3334* (NSW).

P. juniperina Labill. var. *macrophylla* Wawra, *Itinera Principum S. Coburgi* 1: 13 (1883). TYPE: Ebene um Dandenong Coll. I. 592 *n.v.*

P. juniperina Labill. var. *planifolia* H.B. Williamson, *Proc. Roy. Soc. Victoria* n.s. 33: 138 (1921) *nom. illeg.*. TYPE: New South Wales, Clarence River, *Beckler* (MEL).

P. juniperina Labill. var. *mucronata* (Benth.) Corrick

Muelleria 3: 249 (Sept. 1977). BASIONYM: *P. flexilis* var. *mucronata* Benth. TYPE: New South Wales, Clarence River, *Beckler* (MEL).

This taxon differs from *P. juniperina* chiefly in the leaves which are wider above the middle, narrow gradually towards the base and have a mucronate tip. The leaves of *P. juniperina* are broadest near the base and often cordate and narrow gradually into a slender pungent tip. Blakely's protologue describes the leaves of *P. forsythiana* as being paler on the lower surface than the upper. Examination of the type collection does not support this, the lower surface is distinctly darker than the upper, a character which is consistent throughout the range of specimens examined.

The calyx of *P. forsythiana* is glabrous externally except for the densely ciliate margins of the calyx lobes. *P. juniperina* usually has some hairs on the calyx, often dense

and crisped, but a collection (J.H. Willis, Dec 1932, MEL 1619502) from Tonimbuk in Victoria and some Tasmanian collections are almost glabrous.

The seed aril of *P. forsythiana* is narrow and rugose whilst that of *P. juniperina* is intricately divided into numerous fleshy threads. *P. forsythiana* in Victoria shows considerable variation in bracteole size and vestiture. The typical form from the Eastern Highlands and Snowfields has narrow lanceolate bracteoles, longer than the calyx-tube with a very hairy mid-rib. The majority of other collections have broad lanceolate to ovate bracteoles, shorter than the calyx-tube and with the mid-rib only slightly hairy.

SELECTED SPECIMENS EXAMINED

Victoria — 3 km S along Aberfeldy-Walhalla Road from its intersection with Binns Road, 26 Sep. 1985, D.E. Albrecht 1901; Benambra-Corryong Road at Gibbo River bridge, 1 Nov 1977, M.G. Corrick 6008; Otway Range, 8 km SW of Forrest, 26 Oct 1984, S.G. Harris 31; Playground top, between Cobberas No. 1 and Rams Horn, 12 Jan 1949, N.A. Wakefield 2602.

P. forsythiana occurs on heavier loam soils in moist forest, usually on mountain slopes, in Victoria and the Southern and Central Tablelands of New South Wales. *P. juniperina* in Victoria is restricted to sandy soils in the heathland understorey of the Grampians and near Tonimbuk but is widespread in a variety of habitats in Tasmania.

Pultenaea mollis Lindl. in T. Mitch., *Three Exped. Interior East Australia* 2: 258 (1838)

P. viscosa R.Br. ex Benth., *Fl. Austral.* 2: 127 (1864)

P. mollis as currently recognized in Victoria is a highly variable taxon. It is widespread in the state, mainly south of the Dividing Range usually in moist forest as part of a shrub or heathland understorey. Williamson (1922 and 1928) commented on the problems and segregated some taxa.

In publishing *P. viscosa* Benth (1864) includes in his type citation a specimen collected from Mt Sturgeon by Robertson as well as Brown's collection from Parramatta. Under *P. mollis* he cites a collection by Mitchell from Wannon River at the foot of the Grampians. Mitchell's expedition camped on the Wannon River near the foot of Mt Sturgeon and there seems little doubt that both the Robertson and Mitchell collections came from the same population. Benth also commented on the similarities between *P. mollis*, *P. viscosa* and *P. hibbertioides*. *P. hibbertioides* Hook.f. has already been placed in synonymy under *P. mollis* (Corrick 1988). I have seen this plant in the type locality in Tasmania and believe it to be indistinguishable from many of the Victorian populations of *P. mollis*.

P. viscosa, as recognized by Willis (1972), is known in Victoria from only one or two localities in East Gippsland. The large, long bracteoles, large bracts and stipules and broad leaves which are considered to distinguish it from *P. mollis* occur singly or in combination in many populations of *P. mollis*. Variation is particularly evident in the Grampians where the plant is widespread.

I have observed and collected *P. mollis* from most of the areas of Victoria where it occurs and also in southern New South Wales where Mueller collected material cited by Benth (1864) under *P. viscosa*.

Differences between the extremes of variation seem striking but the extremes are linked by an enormous number of intermediate forms; until a complete study of the complex can be undertaken it seems preferable to regard it as one polymorphic taxon.

SELECTED SPECIMENS EXAMINED

Victoria — Wannon River, 14 Sep. 1836, T.L. Mitchell 299 (MEL, ISOTYPE); Wilson's Promontory, 5 Nov. 1980, M.G. Corrick 7075 (MEL); 2.5 miles SE Gembrook, 5 Oct. 1960, T.B. Muir 1293 (MEL); Buffalo Range, Mar. 1853, F. Mueller s.n. (MEL 1503843); Grampians: Junction of Roses Creek and Mt Victory Road, 16 Oct. 1976, M.G. Corrick 5623 (MEL); Mt William Road, 20 Nov. 1976, M.G. Corrick 5715 (MEL).

New South Wales — Nalbaugh National Park, 22 Nov. 1987, D.E. Albrecht 3175 (MEL).

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